

ABSTRACT OF THE DISCLOSURE

Apparatus and method for performing radio environment reporting on a reverse common signaling channel. When a dedicated RF connection
5 between a remote unit (RU) (118) and infrastructure equipment (109) is being released, the RU receives a first message from the infrastructure instructing the RU to perform occasional pilot strength reporting on the reverse common signaling channel (r-csch) while the RU is in the idle state. In the preferred
10 embodiment, the pilot strength reporting is limited by a maximum number of reports and/or a time limit to preserve battery life and prevent r-csch congestion in the system. Preferably, a Radio Environment Report Message, referred to generally herein as a second message, carries radio environment information (REI), such as pilot strength and phase of the best pilots
15 measured, and helps the infrastructure both with tracking the RU location and with selecting a strong set of pilots for channel assignment.